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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,721	03/29/2004	Jang Hui Cho	1740-000071/US/COA	9356
30593	7590	08/11/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			BOCCIO, VINCENT F	
			ART UNIT	PAPER NUMBER
			2616	
DATE MAILED: 08/11/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/810,721

**Applicant(s)**

CHO ET AL.

**Examiner**

Vincent F. Boccio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Response and Amendment of 4/18/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1. ☒ Certified copies of the priority documents have been received.
  - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2616.

**Response to Arguments**

1. Applicant's arguments, filed 4/18/05, with respect to the rejection(s) of claims 1, etc., have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Okada et al. (US 6,181,870).

**Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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2. Claims 1, 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (US 2002/0046328), wherein the US reference is being relied upon as a certified translation in view of WO 00/42515 PUB. Date 7/20/2000, therefore, in view of the date, a {102 b}, reference. In view of Okada et al.(US 6,181,870).

Regarding claim 1, Okada meets the limitations associated with record medium, recording & reproduction apparatus and methods having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

- a data area storing a transport stream of at least video data (Fig. 4, "TRANSPORT Packet of MPEG", "188 bytes", therefore an MPEG transport stream to be recorded to Fig. 5 DVD and Fig. 6, recording in logical zones, transferred to the DVD media thru a 1394 bus, "Isochronous Data Transfer", mode);
- the transport stream being divided transport packets (Fig. 4, "packets" or blocks, dummy packet, IEEE 1394);
- wherein each of the packets can be associated with one of the multiple paths (Fig. 14, multiple channels, recording packets); and
- the transport packets of each path being stored in separate physical domains of the data area from one another (such as shown in Fig. 37, zones 1, 6, 2 resp., zone per/channel, channels 1, 3 and 4 resp.).

Regarding claims 2-8, Okada meets the limitations of having a navigation data (Figs. 41-44), including a map {by zone Fig. 37}, for each path (represented by channels 1, 2, 3, 4 etc.....) and position information (Fig. 42, has at least the leading address for each zone, while Fig. 37, shows zone recording for each channel), for the video of each path, wherein the navigation area includes navigation data item/items, the data items providing NAV. Info., for reproducing each path, having a list of at least the navigation data item/items (various data lists of Figs. 41-44

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etc....., necessary to locate the digitally recorded video etc....., for reproduction), wherein in accord to Fig. 37 each path can be represented by a zone number or not, also the path is also defined by Fig. 44, stream Ids, and/or zones numbers and addresses, in accord to Fig. 42, leader addresses, wherein the Path defined by stream number Ids Fig. 41, or even zone numbers per/channel Fig. 37, represents a digital channel being a sub-channel of an RF channel received to the recording system (see SET TOP BOX, receiving a multi-channel stream (pages 1-2, MPEG 2, "programs of several hundred channels", "SET TOP BOX", Fig. 12).

Claims 9-16 have been analyzed and discussed with respect to the claims above, wherein the claims represent the medium, method of reproduction and apparatus for recording and reproducing, deemed met by Okada,

O but it is noted that claims 15-16 recite additional limitations such as:

O a driver for driving an optical recording device, controller controlling the driver (Fig. 12, shows a driver circuit 63, which is controlled by the "MPU For Disk Access Control, thru the Bus 65), deemed to read on the claimed driver limitation, for driving the optical device in recording as well as reproduction.

Okada {WO}; discloses and reads on the claim language as claimed, but having data corresponding to the claimed, "navigation information, the navigation information including paths, wherein the map provides position information for paths",

but, fails to disclose, wherein the medium,

- has a navigation area storing navigation information, the navigation information including paths, wherein the map provides position information for paths on the medium.

Okada teaches in Fig. 16-17, recording to DVD Ram, having path or navigation information in the DVD, Fig. 70 A, with corresponding map providing position data, Fig. 71, "TIME MAP TABLE", cells to MAP to ADDRESS, on the medium, Fig. 70 A,

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wherein this information since on a DVD RAM can be edited to user defined chains if desired Fig. 70A, as taught by Okada.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify Okada (WO 00/42515) by providing navigation data generated for the multiple paths of Okada (WO), to the medium, as taught by Okada (6,181,870) to the DVD RAM, allowing for editing of the navigation information, wherein the media by having the navigation recorded thereto, allows for transport of the media to other players, such as the conventional Table of Contents, which allows for players to play the medium only with the medium by having the navigation data for the recorded information on the medium, as taught by Okada, wherein editing can also be done with the originally recorded navigation and map information and to record that data, wherein the originals can be edited and user defined can further, be stored, as taught by Okada (US 6,181,870).

Regarding new claims 18-20, based on the combination as applied, renders further obvious having first, second, third type of navigation units wherein the units can be or are associated with different paths, wherein the third and second when simultaneously recording two can be equal, wherein the Map/Maps provide position data for the video, associated with paths or different channels, chains, maps for recordings, deemed met by the combination as applied.

**Contact Fax Information**


Any response to this action should be faxed to:

(571) 273-8300, for communication as intended for entry,  
this Central Fax Number as of 7/15/05

**Contact Information**

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record, Monday-Tuesday & Thursday-Friday, 8:00 AM to 5:00 PM Vincent F. Boccio (571) 272-7373.

Primary Examiner, Boccio, Vincent  
8/8/05

  
VINCENT BOCCIO  
PRIMARY EXAMINER